

NETWORK INTERFACE CARD USING PHYSICAL LAYER
MICROCONTROLLER AND METHOD OF OPERATION

ABSTRACT OF THE DISCLOSURE

There is disclosed an apparatus for controlling a physical
5 layer interface of a network interface card. The apparatus
comprises: 1) a read only memory (ROM) for storing an embedded
control program; 2) a random access memory for storing a
downloadable software control program; and 3) a microcontroller for
controlling the physical layer interface, wherein the
microcontroller in a first operating mode executes the embedded
control program to thereby control the physical layer interface,
and wherein the microcontroller in a second operating mode
downloads the downloadable software control program from an
external processing system and executes the software control
program in place of the embedded control program to thereby control
the physical layer interface.